

CHAPTER 5: RESTATEMENT OF THE PROBLEM, RESEARCH OBJECTIVES AND HYPOTHESIS/PROPOSITIONS

5.1 Introduction

In all the preceding chapters, this thesis has pointed out that higher education institutions and organisations around the world have not been exempt from the demands and impact of a globalising political economy. As in the case of other organisations, universities have been undergoing dramatic reorganisation along principles which converge largely around the economic costs and benefits of higher education. Such reorganisation is occurring within a context that principally takes the global economy rather than the nation's state or national histories as its point of departure or yardstick.

The above trends are bringing universities in line with other social arrangements designed to position national economies for greater global competitiveness. The new policy framework for the restructuring of higher education in developed economies is functioning as a powerful and influential global paradigm, shaping higher education and policies and practices in many developing economies, despite huge social, economic and historical differences.

5.2 Restatement of the problem

The previous chapters emphasise that the new quality assurance dispensation will have to address the requirements of a complex and challenging environment where there is a growing demand for effective education and training within the context of local and global imperatives.

According to the introduction in the CHE Discussion Document, *Quality Assurance in Higher Education* (2003:Introduction): "Quality assurance in higher education in South Africa is neither new nor unfamiliar. A range of internal and external, formal and informal quality assurance arrangements have been in place

for many decades. The work of quality assurance agencies in the technikon and the university sectors, the requirements of professional councils, the external examiner system, departmental reviews and peer review panels for research funding are all examples of quality assurance systems and measures intended to safeguard the standards and quality of provision.

What is new in relation to quality assurance in South Africa is the need to respond to the rapidly changing landscape that now constitutes higher education. The changes include a shift towards a more integrated yet differentiated public sector, a growing private sector, increased work-based training at higher education levels, an outcomes and impact orientation that requires new or vastly changed evaluation systems, and a greater demand for demonstrating higher education responsiveness and relevance to social and economic reconstruction.

The new quality assurance system for higher education in South Africa will have to be a single integrated one that encompasses universities, technikons, agricultural colleges and a range of private providers. In addition, it has to relate the quality assurance of more academic types of programmes to the quality assurance systems of Sector Education and Training Authorities (ETA's) and professional council Education and Training Quality Assurers (ETQA') as increasing numbers of work-based education and training programmes are offered by both public and private providers of higher education".

The CHE's HEQC *Proposed criteria for the HEQC's first cycle of audits: 2004-2009* March 2003 Discussion Document, states that the audit does not seek to measure the actual quality of outputs in relation to teaching and learning, research and service learning. The audit seeks to:

- (i) Establish the nature and extent of the quality management system in place at the institution – what policies, systems, available resources, strategies and targets exist for the development and enhancement of quality in the core functions of higher education.
- (ii) Evaluate the effectiveness of the quality management system on the basis of evidence largely provided by the institution itself. The requirement to provide

indicators of success and evidence of effectiveness, takes the audit beyond a checklist of policies and procedures.

According to the Discussion Document the scope of the audits will cover the broad institutional arrangements for assuring the quality of teaching and learning, research and service learning programmes, as well as other specified areas. Governance, finances and other institutional operations will not be a focus, except in relation to their impact on the above areas.

However, all the previous chapters have stressed the importance for higher education institutions to adopt modern business principles that should underpin the management practices at higher education institutions. These will include the management approaches to business functions such as strategy formulation, finance, investment, risk management, human resources, labour relations, marketing and communication, procurement, quality assurance, client service, innovation, facilities and real estate and information technology.

Higher education institutions should therefore ensure that modern business approaches, practices and methodologies are used in conducting their business, and that these are constantly reviewed and improved to ensure total quality management, innovation and excellence.

In addition to the audits that focus on the academic issues of teaching and learning, research and service learning programmes, additional self-assessment on organisation issues is essential.

Organisational self-assessment in higher education is already widely practised in the USA and Europe. The self-assessment is based on quality models that have been tailor made for the higher education sector such as the MBNQA Education criteria and the HEFCE's two consortiums and their application of the EFQM.

The South African higher education sector is in need of a framework for assessing the quality of the institution, based on the concept that the institution will achieve better results by involving all people in continuous improvement of their processes.

Although it is acknowledged that higher institutions are unique, they are not so unique that no model used in the business sector, cannot be adapted and contextualised to suit the higher education environment. It is also acknowledged that no single model could address all the issues at higher education institutions.

It is therefore proposed that a **framework** be used referring to quality models that have been adapted for the higher education sector in the USA and Europe, as well as quality studies on higher education worldwide.

This framework will be based on the findings of the application of the SAEM at a higher education institution. The SAEM model combines the best of the United States (MBNQA), Europe (EFQM), Australia (Australian Quality Award), United Kingdom (United Kingdom Quality Award) and Japan (Deming Prize), but it incorporates a South African emphasis in accordance with national priorities.

It is a powerful management process that will allow higher education institutions to assess their levels of efficiency and effectiveness, identify gaps in their processes, and institute significant performance improvements to achieve higher levels of competitiveness.

The focus of the SAEM is self-assessment that comprises a comprehensive, systematic and regular review of a higher education institution's activities and results, referenced against a model of performance excellence. The self-assessment process will allow a higher education institution to clearly identify its strengths and areas in which improvements can be made.

Regarding the self-assessment approaches a combination of workshops and the SAEM public sector level 3 questionnaire will be used as this sector most closely resembles the higher education sector. As indicated in Chapter 1, the SAEF currently only makes provision for the following sectors:

- Business/Defence industry
- Public service
- SME

- Local government

Reference was also made to the fact that the SAEF introduced three levels instead of only one for each of these sectors to enable more South African organisations to apply for the award. At level 3, the starting level, organisations apply for an excellence certificate. At level 2, the more advanced level, organisations apply for an excellence prize and at level 3, the most advanced level, organisations apply for an award.

Of the three levels available, level 3, the starting level, was selected as it was assumed that higher education institutions are at the start of the continuous improvement journey.

5.3 Research objectives

The main objective of the study is to contextualise and integrate quality models and quality studies to provide a framework for continuous improvement in higher education institutions. This will comprise the following sub-objectives:

5.3.1 Research objective 1

To determine the shortcomings and contextualise the SAEM Public Sector, level 3 self-assessment questionnaire for the higher education sector.

5.3.2 Research objective 2

To provide a format for self-assessment workshops within the higher education context.

5.3.3 Research objective 3

To investigate if the self-assessment results can be used as part of the SWOT analysis phase during strategic planning and to link the strategic objectives to the Balanced Scorecard.

5.3.4 Research objective 4

To link a discipline, e.g. marketing and communication initiatives to the SAEM.

5.3.5 Research objective 5

To benchmark faculties and the support service departments.

5.3.6 Research objective 6

To propose continuous improvement initiatives for the higher education sector.

5.3.7 Research objective 7

To propose a framework of continuous improvement for the higher education sector referring to quality models and quality studies in higher education institutions.

5.4 Hypothesis

5.4.1 Research question 1

Is the SAEM Public Sector Level 3 questionnaire ideally suited to ensure continuous improvement at higher education institutions?

Hypothesis 1

The Public Sector Level 3 questionnaire needs to be adapted to be applicable for higher education institutions to ensure continuous improvement.

5.4.2 Research question 2

Is there a preferred format for a self-assessment workshop to ensure effective self-assessment results?

Hypothesis 2

There is a preferred format that can be used to ensure effective self-assessment workshop results.

5.4.3 Research question 3

Can the results of the self-assessment workshop be used as part of the SWOT analysis phase during strategic planning and can the strategic objectives be linked to the Balanced Scorecard?

Hypothesis 3

The results of the self-assessment workshop identifying strengths and areas for improvement can be used during the SWOT phase and can also be linked to the Balanced Scorecard to ensure results.

5.4.4 Research question 4

Can a discipline e.g. marketing and communication initiatives, be linked to the SAEM?

Hypothesis 4

The strategic objectives can be linked to the disciplines e.g. marketing and communication, and these initiatives can be plotted on the SAEM to address the areas for improvement.

5.4.5 Research question 5

Can faculties and support services be benchmarked using the results of the SAEM?

Hypothesis 5

The results of the SAEM can be used to benchmark faculties and support services in higher education institutions.

5.4.6 Research question 6

Are there continuous improvement initiatives that can be used for the higher education sector and plotted on the SAEM?

Hypothesis 6

There are generic continuous improvement initiatives used in other quality models that can be plotted on the SAEM.

5.4.7 Research question 7

Can the higher education self-assessment quality models used in the USA and UK, as well as other quality studies in higher education be used to propose a framework of continuous improvement for higher education in South Africa?

Hypothesis 7

The self-assessment quality models in the United States and the United Kingdom and other quality studies in higher education can be integrated to provide a framework for continuous improvement in the higher education sector in South Africa.

5.5 Research design

The focus of the model is self-assessment which comprises a comprehensive, systematic and regular review of a higher education institution's activities and results, referenced against a model of performance excellence. The self-

assessment process will allow a higher education institution to clearly identify its strengths and areas in which improvements can be made.

The SAEM, Level 3 for the public service self-assessment questionnaire will be contextualised for South African higher education institutions. The application of the self-assessment findings will also be linked to the strategy planning process and the business plan. The core values and concepts of the Baldrige National Quality Program on Education Criteria for Performance Excellence and the Higher Education Funding Council for England's Consortiums will also be incorporated. Various quality studies in higher education will also be investigated.

To achieve the specific research objectives set, a qualitative research design has been selected. This approach is particularly suited to the exploratory and descriptive design of the study, as it allows an in-depth investigation of the deficiencies in the current SAEM and the application of the SAEM within a strategic framework.

The research will be conducted in six phases:

Phase 1

Conduct a pre-workshop and discuss questionnaires to determine shortcomings of the workshop and SAEM, Level 3 Public Service questionnaire with a corporate group at a university.

Phase 2

Conduct workshops and complete questionnaires to determine shortcomings in the self-assessment workshop and SAEM, Level 3 Public Service questionnaire with faculties and departments and benchmark the faculties and service department

Phase 3

Conduct a strategy session in a faculty to determine if the self-assessment findings can be used during the SWOT phase in a strategic planning session. Link the strategic objectives to the balanced scorecard.

Phase 4

Analysis, comparison, personal interview and incorporation of the lessons learnt from the United Kingdom Consortium for Excellence in Higher Education as well as the Malcolm Baldrige Excellence in Education as well as other quality studies in higher education.

Phase 5

Revise and contextualise the questionnaire and self-assessment workshop for South African higher education institutions.

Phase 6

Provide a framework of continuous improvement at higher education institutions, incorporating all the knowledge gained during phases one to five.

5.6 Methodology

5.6.1 Research objective 1

To determine the shortcomings and contextualise the SAEM Public Sector, level 3 self-assessment questionnaire for the higher education sector.

To achieve this first objective, the means of exploration was workshops and a completion of an electronic questionnaire by means of keypads. The results were immediately available. The questions and comments from respondents, as well as

an analysis of the results were used to adapt the workshop and questionnaire to make it relevant in a higher education environment.

5.6.2 Research objective 2

To provide a format for self-assessment workshops within the higher education context.

To achieve this second objective, the means of exploration were workshops to determine the most effective way of conducting self-assessment workshops.

5.6.3 Research objective 3

Can the results of the self-assessment workshop be used as part of the SWOT analysis phase during strategic planning and can the objectives be linked to the Balanced Scorecard?

To achieve this third objective, the means of exploration was a follow-up strategy session workshop where the results of the self-assessment workshop were used during the SWOT phase and the objectives were linked to the Balanced Scorecard.

5.6.4 Research objective 4

To link a discipline, eg marketing and communication initiatives to the SAEM.

To achieve this fourth objective, the marketing and communication strategic objectives were broken down into sub-objectives. The marketing and communication plan was then linked to initiatives plotted on the SAEM.

5.6.5 Research objective 5

To benchmark faculties and the support service department.

To achieve this fifth objective, the results of the SAEM were used to compare the faculties and the support service department, prioritise the areas for improvement and strengths and determine trends.

5.6.6 Research objective 6

To link continuous improvement initiatives for the higher education sector to the SAEM.

To achieve this sixth objective, the lessons learnt and initiatives used in quality models in the UK and USA were analysed and the most important initiatives were linked to the SAEM.

5.6.7 Research objective 7

To propose a framework of continuous improvement for the higher education sector referring to quality models and quality studies in higher education institutions.

To achieve this seventh objective, a comprehensive analysis was done on the Malcolm Baldrige Education Criteria for Performance Excellence and the United Kingdom Consortium for Excellence in Higher Education as well as other quality studies.

The SAEF was informed on a regular basis of progress made with the thesis and a copy of the thesis was made available.

5.7 Unit of analysis

The unit of analysis consisted of academic and support staff in faculties, one service department, and a corporate group with representatives from faculties and service departments.

5.8 Time frame

The research was conducted from September 2001 to September 2002.

5.9 Population

The population was the University of Pretoria. There were 56 respondents

5.10 Sampling

5.10.1 Faculties

In the five selected faculties 10-15 respondents were selected who were representative of the various levels.

5.10.2 Support services

In the selected support service department 10-15 respondents were selected who were representative.

5.11 SAEM Level 3 public sector questionnaire design

The questionnaire was computerised and completed in a group situation. Each respondent was provided with a keypad. Questions were explained on a screen and respondents participated by answering questions on the keypad.

All information collected via the keypads was processed using the statistical techniques of the current SAEM questionnaire.

The Public Service Level 3 questionnaire was used. The format and content of the questionnaire were described in detail in Chapter 3.

5.12 Respondents

5.12.1 Faculties

The faculties were represented by the following respondents:

- Dean
- Heads of Schools
- Heads of Departments
- Professors
- Associate professors
- Senior lecturers
- Lecturers
- Student Admin
- Secretaries
- Admin

5.12.2 Support service department

Representatives from all sections within the support service department were selected.

5.13 Data capturing and tabulation

Fig 14: Keypad



(Seymore van Biljon)

An alpha numeric keypad was used and respondents were requested to score 1, 2, 3 or 4 according to the scoring definitions for enablers and results.

5.14 Results

5.14.1 Scoring of data

Data was scored according to the statistical techniques as used by SAEM.

Scoring of data – Level 1**1. Leadership**

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

% achievement Weighted points Your actual points

Total divided by 11 = of 100 =

2. Strategy and Planning

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

% achievement Weighted points Your actual points

Total divided by 4 = of 100 =

3. Customer and market focus

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	% achievement	Weighted points	Your actual points
Total divided by 5 =	<input type="text"/>	of 100	= <input type="text"/>

4. People management

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	% achievement	Weighted points	Your actual points
Total divided by 9 =	<input type="text"/>	of 100	= <input type="text"/>

5. Resources and Information management

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	% achievement	Weighted points	Your actual points
Total divided by 11 =	<input type="text"/>	of 100	= <input type="text"/>

6. Processes

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	%		Weighted		Your	
	achievement		points		actual	
					points	
Total divided by 8	=		of	100	=	

7. Social responsibility

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	%		Weighted		Your	
	achievement		points		actual	
					points	
Total divided by 4	=		of	100	=	

8. Customer satisfaction

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	%	Weighted	Your
	achievement	points	actual
			points
Total divided by 2	=	of 100	=

9. People satisfaction

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	%	Weighted	Your
	achievement	points	actual
			points
Total divided by 3	=	of 100	=

10. Supplier and Partnership performance

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

	%	Weighted	Your
	achievement	points	actual
			points
Total divided by 10	=	of 100	=

11. Results

Scale	1	2	3	4
Number of responses per scale (a)				
Factor (b)	0	33	67	100
Value (a x b)				
= Total				

		% achievement		Weighted points		Your actual points
Total divided by 6	=		of	100	=	

Scoring of data – Level 2

Once the results of all of the 11 sub-sections were calculated, the following statistical process was used to weight the results:

Difference = Criteria Weighted Points – Criteria Total Points Scored

5.14.1.1 Weighted points

The following Criteria and Weighted Points were used per sub-section.

Criteria	Weighted Points
Enabler Criteria	
Leadership	25
Policy and Strategy	17
Customer and Stakeholder Focus	15
People Management	23
Resources and Information Management	15
Processes	30
Total for Enabler Criteria	125
Results Criteria	
Social Responsibility	15
Customer and Stakeholder Satisfaction	43
People Satisfaction	22
Supplier and Partnership Performance	7
Organisation Results	38
Total for Results Criteria	125

5.14.1.2 Differences

These differences were then ranked to determine the focus in priority.

Within each of these subsections, the areas for improvement and areas of strength were determined as follows:

- All scores ≤ 2 were categorised as **areas for improvement**
- All scores ≥ 3 were categorised as **strengths**

5.15 Reporting

After each workshop a printout was made of the results, as well as graphs.

5.16 Summary

This chapter stated that the main objective of the study was to provide a strategic framework by contextualising the SAEM Level 3 public service questionnaire for higher education institutions and providing a framework for self-assessment that would enable these institutions to:

- Assess their levels of efficiency and effectiveness.
- Identify gaps in their processes.
- Institute significant performance improvements to achieve higher levels of competitiveness within a strategic framework.

A number of research propositions and hypotheses were formulated to cover the main areas included in the research instruments. These research propositions and hypotheses also provide the basis for integrating the best of the Malcolm Baldrige Criteria for Higher Education and the United Kingdom Consortium for Excellence in higher Education models.

In the next chapter the research results and analysis will be provided.